

PYROCHROIDAE.

8220—NEOPYROCHROA FLABELLATA Fab. Toccoa VI, 16, 29.

8225—DENDROIDES BICOLOR Newm. Stone Mt. IV, 28, 27.

PEDILIDAE.

8278—MACRATRIA CONFUSA Lec. Cornelia VI, 16, 29.

8279—M. MURINA Fab. Dahlonga VII, 9, 31.

ANTHICIDAE.

8283—NOTOXUS BICOLOR Say. Clarkesville V, 28, 34.

8304—N. MONODON Fab. Gainesville VI, 24, 31.

8359—ANTHICUS STURMI Laf. Toccoa VI, 16, 29.

EUGLENIDAE.

8475—ELONUS BASALIS Lec. Savannah IV, 11, 31.

8477—EMELINUS MELSHEIMERI Lec. Rockmart VIII, 17, 28.

CEBRIONIDAE.

8516—CEBRIO BICOLOR Fab. Atlanta VII, 29, 27; VIII, 9, 29 (2).

Notes on Some Spiders of the Family Pisauridae (Araneae).

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Since the publication by one of us (Bishop, 1924), of the Revision of the Pisauridae of the United States, a number of specimens have come to hand which provide material for the description of four males not previously known.

Several specimens of *Dolomedes pinicola* Hentz were received from Mr. Stanley Mulaik of Edinburg, Texas, and Dr. W. J. Gertsch of the American Museum has sent us specimens of *Thanatidius dubius* Hentz, *Dolomedes striatus* Giebel and *Thaumasia peregrina* Bishop. The records of a few additional species are added.

Key to the Males of *Dolomedes*.

1. A spinose hump on the femur of the fourth leg beneath 2
 No spinose hump on the femur of the fourth leg beneath 3
2. Tibial apophysis very long, extending almost one-half the
 length of the bulb *tritron* Walckenaer
- Tibial apophysis short, extending only to the base of the
 bulb *vittatus* Walckenaer
3. Median apophysis of bulb broad, produced to a point near

- the tip on the side toward the embolus 4
 Median apophysis of bulb slender, distal half narrow,
 ribbon-like, almost transparent 7
 4. Median apophysis of bulb constricted at base 5
 Median apophysis of bulb broad throughout; tibial
 apophysis wide and ear-like *striatus* Giebel
 5. Apophysis of tibia broadly dilated and deeply notched
 distally 6
 Apophysis of tibia short, concave internally, broadly
 notched at tip; venter of abdomen with a definite median,
 light stripe from the genital furrow to the spinnerets; ab-
 domen above white or grayish white marked with light
 brown *albiviscus* Hentz
 6. A tooth at the base of tibial apophysis on the ventral side;
 abdomen above dull yellow without definite dark mark-
 ings *pinicola* Hentz
 No tooth at the base of tibial apophysis on the ventral
 side; abdomen above crossed by several transverse, W-
 shaped white lines *scriptus* Hentz
 7. Median apophysis acutely angled at middle of its length;
 basal half abruptly swollen in the middle *tenebrosus* Hentz
 Median apophysis nearly right-angled at middle of its
 length; basal half not conspicuously swollen
okcfinokensis Bishop

DOLOMEDES PINICOLA Hentz (Figure 1).

Micrommata pinicola Hentz, Jour. Bost. Soc. Nat. Hist. 6:287,
 pl. 10, fig. 14. 1850.

Dolomedes pinicola Bishop, N. Y. State Mus. Bul. No. 252,
 pp. 60-61, pl. 35. 1924.

Tcippus lamprus Chamberlin, Proc. U. S. Nat. Mus. 63:28.
 1924.

The male has not been described. Hentz had only the female,
 as indicated in his figure, and Bank's specimen was an immature
 female. The specimen described by Chamberlin as *Tcippus*
lamprus is a young individual less than half grown.

♂. Length, 10 mm. Cephalothorax, length, 5 mm., width,
 4.5 mm. Cephalothorax with the ground color orange yellow,
 on either side of the mid-dorsal line a broad dusky band with
 a narrow anterior extension enclosing a light oval area back
 of the eyes, extreme margins slightly dusky; the light areas of
 the sides of the thorax clothed with soft white hairs, the light
 area back of the eyes and the dusky bands clothed with brown

hairs; extreme margin of the cephalothorax and median ocular area clothed with long white hairs directed forward. Viewed from above, the cephalothorax is broad, evenly rounded on the sides to the posterior eyes then sharply converging to the rather truncated front; viewed from the side, the posterior declivity short and steep, then gently rounded over to the cervical groove, top of head flat and nearly level.

Posterior eyes in a strongly recurved line, equal, the median separated by three-fourths the diameter and from the lateral by the diameter. Anterior eyes in a very slightly recurved line, the median larger than the lateral, separated by two-thirds the diameter and from the lateral by one-third the diameter. Median ocular area broader than long, height of clypeus two and one-half times the diameter of an anterior median eye. Chelicera orange yellow, lower margin of the furrows with three teeth on one and four on the other.

Abdomen above yellowish white, finely reticulated and with a median, basal, lanceolate area smooth, followed by two rows of small brown spots slightly converging and decreasing in size posteriorly. Sides of abdomen dull yellowish, clothed with short white hairs; venter yellowish and clothed as on the sides; back of the epigastric furrow a broad white area, widest in front, converging posteriorly and marked with two indistinct lines of brown dots extending to the spinnerets.

Legs and palpi dusky orange yellow, the legs in order of length 1-4-2-3; 29-27-25-21 mm. respectively; tibiae of first and second legs beneath with 4-4 spines, the apical short, others long but not overlapping. Sternum orange-yellow with a broad submarginal dusky band. Labium and endites orange yellow.

Tibia of palpus moderately long and stout, the distal meso-ventral angle produced into a broad lobe; the apophysis broadly attached at base, deeply excavated distally and armed at base on the ventral side with a short, curved black tooth. The tegulum is roughly horseshoe-shaped, the distal arm longer and broader than the ventral; the median apophysis narrow at base, widened distally and expanded into a thin transparent flange which is drawn out to a beak-like point on the lateral side; the long, slender, whip-like embolus arises at the back of the bulb and curves forward and ventrally, its tip resting in the groove of the fulcrum and covered by the membranous conductor.

By the form of the tibial apophysis and the structure of the bulb, this species is evidently related to *Dolomedes albincus* and *D. scriptus*.

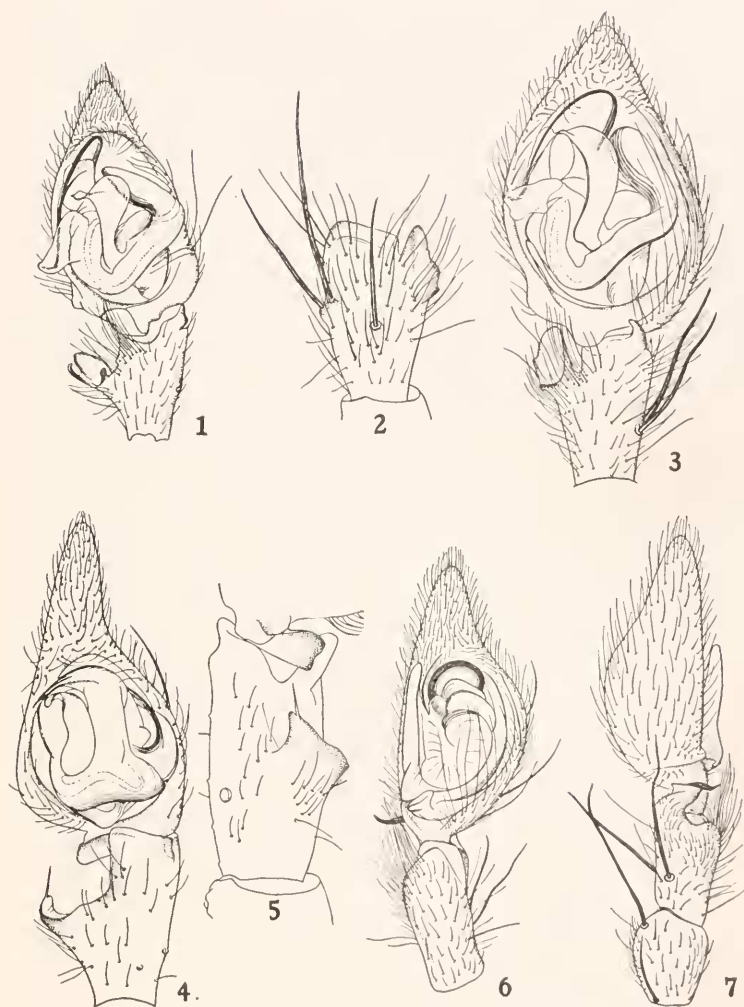


Fig. 1. *Dolomedes pinicola*, ♂, right palpus, ventral view. 2. *Dolomedes striatus*, ♂, tibia of right palpus, dorsal view. 3. Same, right palpus, ventral view.

Fig. 4. *Thanatidius dubius*, ♂ right palpus, ventral view.

5. Same, ♂, tibia of right palpus, dorsolateral view. 6. *Thaumasia peregrina*, ♂, right palpus, ventral view. 7. Same, dorsolateral view.

TEXAS: Edinburg, Sept.-Oct., 1933, 1 ♂ (Mulaik) (*Allotype*). FLORIDA: Wewahitchka, Dead Lake, April 6, 1927, 1 ♀ (Crosby).

Dolomedes striatus Giebel (Figures 2-3).

Dolomedes striatus Giebel, Zeit. Ges. Natur. 33:252. 1869.

Dolomedes striatus Bishop, N. Y. State Mus. Bul. No. 252, pp. 57-59, pl. 33, fig. 1, pl. 34, fig. 2. 1924.

The male resembles the female closely in color and pattern but is a little smaller.

♂. Length, 11 mm. Cephalothorax, length 5.5 mm., width, 4.5. Legs 4-1-2-3; 24-22-21-19, long respectively; tibiae of first and second legs beneath with 4-4 spines, the apical short, the others long and overlapping.

Femur of the palpus long and slender, somewhat compressed at base and slightly widened distally; armed above with a transverse, curved row of four dark spines just back of the tip, followed by a row of three spines along the mid line; patella short and with the sides nearly straight, slightly convex above and armed above at base with a long slender black spine; tibia slender at base, evenly widened distally, produced at the tip ventromesally into a distinct tooth-like projection and dorso-laterally into a broad ear-shaped apophysis diagonally truncate at tip; tibia armed above at the middle of its length with a single long black spine and mesally by a pair of black spines.

In the form and position of the tegulum and embolus, this species closely resembles *D. pinicola*; the median apophysis, however, is of nearly uniform width throughout and the tip on the lateral side is a much sharper point.

Since this species was reinstated in 1924, a number of additional specimens have been found. NEW YORK: Mendon Ponds, Monroe Co., Sept. 28, 1928, 1 juv. ♂ (Bishop). CONNECTICUT: Norwalk, June 4, 1933, 1 ♂ (*Allotype*); July 10-11, 1933, 1 ♂ (Gertsch). NEW JERSEY: Ramsey, July 9, 1934, 1 ♀; Sept. 24, 1934, 1 ♀ (Gertsch).

THANATIDIUS DUBIUS Hentz (Figures 4-5).

Thomisus ? dubius Hentz, Bost. Soc. Nat. Hist. Jour. 5:448, pl. 23, fig. 11. 1847.

Thanatidius dubius Simon, Hist. Nat. Araignées 2:288, 293. 1898.

Thanatidius dubius Bishop, N. Y. State Mus. Bul. No. 252, pp. 17-18, pl. 1, pl. 33, fig. 2. 1924.

We have seen only one male of this species, a specimen in which the abdomen is lacking. Dr. W. J. Gertsch has compared this specimen with one from Southern Pines, North Carolina, and found them to be identical and there are several males in the collection of the Museum of Comparative Zoology at Cambridge from the same locality.

♂. Cephalothorax, length, 4.5 mm.; width, 3 mm. The cephalothorax has the characteristic markings of the female. They consist essentially of a broad, median, brown band in which there is a light line through the dorsal groove; the light line widens anteriorly to the width of the ocular area then narrows and passes between the posterior median eyes; sides of the cephalothorax dull yellowish. The eyes are in four rows as in the female but the posterior lateral and median eyes are slightly larger than the anterior. The legs are too much broken to determine the relative lengths.

Femur of palpus rather long and slender, somewhat widened distally; patella short, convex above; tibia viewed from above, narrow at base and with the mesal side nearly straight, strongly protuberant on the lateral side, at the middle of the length, where the apophysis is borne; apophysis a broad, black, shovel-shaped process bearing on its dorsomesal angle a long sharp spine. Base of cymbium, on the lateral side with a low rounded protuberance ventrad of which there is a longer, heavier process. The bulb of the palpus is comparatively simple; the embolus arises on the mesal side, makes a half-turn around the bulb next to the cymbium and emerges near the tip on the lateral side.

TEXAS: Edinburg, 1 ♂ (Mulaik) (*Allotype*). NORTH CAROLINA: Southern Pines, June 1920, 1 ♂ (W. T. Davis). MISSISSIPPI: Ocean Springs, Jan. 1905, 1 ♀ (Comstock). THAUMASIA PEREGRINA Bishop (Figures 6-7).

Thaumasia peregrinus Bishop, N. Y. State Mus. Bul. No. 252, pp. 62-63, pl. 36, pl. 37, fig. 1-4. 1924.

The male of this species closely resembles the female in form, color and pattern. The size, and the proportions of the body and legs are somewhat different as indicated below.

♂. Length, 10 mm. Cephalothorax, length, 5 mm., width, 4 mm. Legs in order of length, 4-(1-2)-3, 37-34-34-29 mm. long respectively; tibiae of first and second legs beneath with

4-4 spines, the distal pair short, the others long but not overlapping.

Femur of palpus narrow at base, concave on the mesal side and widened distally, marked above near the middle of its length by an indistinct grayish patch and armed above with six long, stout, black spines, four forming a transverse curved line near the tip of the segment, the other two in the mid-line near the middle of the length; patella short, stout, strongly convex above and armed above near base with a slender black spine and distally by a very long, stout, sinuous, black spine; tibia narrower than patella and with the sides nearly straight, armed above at base with a pair of long black spines and on the mesal side at base by a basally stout, apically slender black spine set at right angle to the segment; the tip of the tibia above strongly compressed and produced into a long point from the lateral side of which the tibial apophysis extends laterally at nearly a right angle; the tip of the apophysis is slender, flattened and curved forward.

The bulb of the palpus differs markedly from that of other genera of Pisauridae and in the absence of sufficient material to permit the expansion of a palpus for detailed study, the parts are difficult to homologize. The tegulum is narrow and is exposed only at the base of the bulb; the embolus is a stout, black, sharply curved rod which arises at the back of the bulb, makes one complete turn around the end, the tip emerging on the lateral side above a long stout process which extends the entire length of the bulb on the lateral side.

The *type* of the species, a female, was taken at Hot Springs, ARKANSAS. TEXAS: Rio Grande City, Starr Co., July, 1934, 1 ad. ♂, (Allotype) 1 juv. ♂, 1 juv. ♀ (Mulaik).

The following new records are of interest:

PELOPATIS UNDULATA Keyserling. MISSISSIPPI: Ocean Springs, July 13, 1930, 1 ♀ (Dietrich). FLORIDA: Gainesville, Mar. 4, 1933 (Wallace).

PISAURINA BREVIPES Emerton. NEW YORK: Lake Sebago, Interstate Park, July 23, 1934, ♀ ♀ (Gertsch). NEW JERSEY: Ramsey, Aug. 26, 1934, ♀ ♀ (Gertsch).

DOLOMEDES OKEFINOKENSIS Bishop. FLORIDA: Gainesville, Jan. 24, 1933, 1 ♀ (Wallace); Mar. 4, 1933, 1 ♀ (Wallace).

DOLOMEDES ALBINEUS Hentz. FLORIDA: Gainesville, Jan. 29, 1932, 1 ♂; Jan. 11, 1933, 1 ♀; Nov. 23, 1933, 1 ♀ (all Wallace).